

REMARKS

The applicants have filed an RCE and an IDS herewith and request the Examiner to consider both the prior art being cited and the arguments presented below. In the final rejection of January 10, 2006, the Examiner objected to the specification for a couple of reasons. First, regarding the application serial number and filing date being placed on each page, the applicants refer the Examiner to page 3 of the applicant's response of October 3, 2005 where this amendment was requested. Second, regarding the Examiner's objection to the terms listed on page 2 of the present office action, the applicants submit that A8, A11 and A9 are well-known telecommunications signaling protocols. For example, a person in the art familiar with the well-known industry standards, such as those published by the 3GPP2 organization via www.3gpp2.com, would understand that "A8 bearer" describes a particular type of A8 connection, that "CM Service Request" is a particular type of message that may be sent from a BS to an MSC, that "A11-Registration Request," "A11-Session Update" and "A11-Registration Reply" refer to particular A11 messages, and that "A9-Connect-A8" refers to a particular A9 message. Furthermore, the prior art presently cited also refers to some of the terms objected to by the Examiner. Thus, the applicant submits that he is not acting as his own lexicographer and not defining these terms contrary to their ordinary meaning.

Claims 7-19 and 21-25 would be allowed if rewritten in accordance with the present office action. Claims 1-19 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The applicant respectfully disagrees with these rejections, but has amended the claims for clarification nonetheless. To address the § 112 rejection of claims 1-19, the applicant has amended claims 1-4, 6-12, 15-16, 19-23 and 25 to clarify the references to signaling. In particular, the applicant submits that the confusion in this matter appears to be regarding two types of signaling recited in claims 1 and 20. The first type is "signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS)." Claims 2 and 22 refer to this signaling. The second type is "signaling between the MS and the target PDSN related to the inter-PDSN handoff." Claims 3-4, 6-12, 15-16, 19, 21, 23 and 25 refer to this second type of

signaling. The applicant submits that references to the various types of signaling are now clear in the claims.

Claims 1, 4-6 and 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Madour et al. (U.S. Publication Number 2001/0050907, hereinafter “Madour”), claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Harper et al. (U.S. Publication Number 2003/0021252, hereinafter “Harper”), and claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Perras (U.S. Publication Number 2002/0141369). Respectfully disagreeing with these rejections, reconsideration is requested by the applicant.

Independent claim 1 recites (emphasis added) “establishing, by the AN with the MS, a traffic channel (TCH) **to support the inter-PDSN handoff.**” Independent claim 20 recites (emphasis added) “An Access Network (AN)... comprising... a base station (BS)... adapted to establish, with the MS, a traffic channel (TCH) **to support the inter-PDSN handoff.**” The Examiner refers to Madour [0006, 0016, 0017, 0040 and 0064] as teaching the language of claims 1 and 20. Madour [0006, 0016, 0017, 0040 and 0064] reads (emphasis added):

[0006]In the case of the authentication failure, an authentication center (AC) may be co-located with the MSC or with a Home Location Register (HLR). When an MS attempts to use a packet-data service, the MSC and the Base Station Controller (BSC) serving the MS take steps to allocate a radio traffic channel. In parallel, the BSC begins setting up a data path between the MS and a Packet Data Service Node (PDSN). In many cases, the path between the MS and the PDSN may be set up faster than the authentication is reported to the MSC. If an authentication failure is reported to the MSC after the data path is set up between the MS and the PDSN, the MSC deallocates the radio resources that were allocated to the MS, but presently does not do anything to release the data path.

...
[0016]In yet another aspect, the present invention is a method of optimizing the use of packet-resources by eliminating a hanging packet- data connection when an authentication failure is received for an MS after the MS performs an intra-BSC/intra-PCF/inter-PDSN dormant handoff. The method includes the steps of sending an indication of the authentication failure from the MSC to the BSC; sending from the BSC, an update message to the PCF that includes an identity of the MS and an indication that authentication failed for a dormant packet-data session; sending an indication from the PCF to the PDSN indicating that the lifetime of the packet-data connection is zero (0); and releasing the packet-data connection by the PDSN in response to the indication from the PCF.

[0017]In yet another aspect, the present invention is an MSC in a wireless access network that includes a first signaling means for receiving a message from a BSC indicating that an MS has powered down during a packet-data session; means for determining in the MSC that the packet-data session is dormant; and a second signaling means for sending an instruction to the BSC to release network resources associated with the packet-data session.

[0040]If it is determined at step 37 that the packet-data session is dormant, the method moves to step 41 where the MSC updates the location of the MS in the MS's HLR, and then instructs the BSC to release the traffic and control channels that are allocated to the MS at 42. At step 43, the MSC sends a Location Update Accept message to the BSC and includes an instruction to release the resources associated with the PPP session. At 44, the BSC sends an A9-Update-A8 message to the PCF 16 with an indication of the dormant power-down by the MS. In response, the PCF tears down the associated resources, and the PDSN releases the PPP connection at step 45.

[0064]FIG. 9 is a flow chart illustrating the steps of the method **when there is an authentication failure following an inter-PDSN dormant handoff**. At step 125, the MS performs an inter-PDSN dormant handoff. At 126, the packet-data session is reactivated **due to the sending of agent advertisements and PPP re-negotiation**. The reactivation includes the establishment of an SCCP connection 14 between the MSC 11 and the BSC 12. At 127, the MSC sends a Clear command to the BSC using the SCCP connection. The Clear command includes a cause value "authentication failure". The BSC reacts by clearing the traffic channel at 128, and at 129, sending an A9-Release-A8 message to the PCF 16. The A9-Release-A8 message includes the cause value "authentication failure". At 130, the PCF reacts by clearing the A8 connection 17 and initiating the closure of the A10 connection 19. This action triggers the PDSN 18 to release the PPP connection at step 131.

Thus, the applicants submit that Madour, as cited by the Examiner, does not teach establishing, by the AN with the MS, a traffic channel (TCH) **to support the inter-PDSN handoff**. The traffic channels that Madour refers to in the above paragraphs all appear to be for purposes other than to support an inter-PDSN handoff. Clearly, TCHs are used for many purposes. However, the applicants have claimed a new use that the prior art does not appear to teach or suggest.

In the Examiner's *Response to Arguments* section of the present office action, the Examiner again cites Madour [0006] as teaching the establishment of a traffic channel to support an inter-PDSN handoff. The Examiner specifically quotes Madour as saying that when an MS attempts to use a packet-data service, the MSC and the Base Station Controller (BSC) serving the MS take steps to allocate a radio traffic channel.

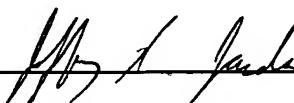
Again, the applicants submit that it is well-known to establish TCHs to support many different types of services, such as to support the packet-data service in Madour. However, as cited, Madour does not teach or suggest **establishing** a traffic channel to support an inter-PDSN handoff.

Since none of the references cited, either independently or in combination, teach all of the limitations of independent claims 1 or 20, or therefore, all the limitations of their respective dependent claims, it is asserted that neither anticipation nor a *prima facie* case for obviousness has been shown. Furthermore, no amendment made was for the purpose of narrowing the scope of any claim, unless it has been argued herein that such amendment was made to distinguish over a particular reference or combination of references. No remaining grounds for rejection or objection being given, the claims in their present form are asserted to be patentable over the prior art of record and in condition for allowance. Therefore, allowance and issuance of this case is earnestly solicited.

The Examiner is invited to contact the undersigned, if such communication would advance the prosecution of the present application. Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. **502117 -- Motorola, Inc.**

Respectfully submitted,
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